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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/663,231 | 09/16/2003 | Gianfranco Guderzo | CAM3-PT051 | 3756 |
| 3624 | 7590 | 06/15/2004 | EXAMINER | |
| VOLPE AND KOENIG, P.C. UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103 | | | LUM VANNUCCI, LEE SIN YEE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3611 | |

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/663,231

Applicant(s)

GUDERZO ET AL.

Examiner

Lee Lum

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 17-20 is/are rejected.
- 7) ☒ Claim(s) remaining is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The disclosure is objected to because the following elements lack antecedent basis:
 - in Claim 6 – repetition,
 - in Claim 7, line 2 – distance, two adjacent sprockets,
 - in Claim 8, line 12 – physical, line 13 – physical, last line – adjustment variables,
 - in Claim 9, line 3 – value,
 - in Claim 11, fourth-to-last line – physical, third-to-last – logic value,
 - in Claim 12 – smallest,
 - in Claim 13 – value,
 - in Claim 15 – current value,
 - in Claim 21 – relative position,
 - in Claim 27, line 5 – hub, rear, axle, line 6 – pedal cranks,
 - in Claim 31, second-to-last line – physical position,
 - in Claim 33 – smallest, rear,
 - in Claim 34 – current value,
 - in Claim 35 – differential, pair,
 - in Claim 36 – differential,
 - in Claims 37 and 38 – physical position,
 - in Claim 39 – relative position,
 - in Claims 42 and 44 – rear,
 - in Claim 47, line 7 – gearshift,
 - in Claim 49 – desired,
 - in Claim 53, line 6 – difference,
 - in Claim 57 – physical position.

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2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al 4490127.

Matsumoto discloses a method for controlling an electronically servo-assisted bicycle gearshift comprising the steps of

Driving actuator 4/5 of the gearshift 15 to displace chain 9 with respect to a gearshift group 3A-E having a plurality of sprockets (inherent),

Receiving information in controller 46 on a desired alignment between the chain and a predetermined sprocket (col 7, lines 10-22),

Setting an adjustment variable (col 6, lines 3-5, and 38-44) in the controller, of a logic value ("binary code"; col 7, lines 14-18) associated with a gear ratio relative to the predetermined sprocket to a value corresponding to the displacement,

The adjustment variable being one of a plurality, each associated with a gear ratio (col 6, lines 3-5),

Receiving the displacement request signal of the actuator (col 7, lines 10-22),

Chain displacement step, and receiving the displacement request signal step, are repeated until information is received (fig 10; "looping" of program), and, Providing user interface 49.

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto in view of Lautenschlager 4786049.

Matsumoto does not disclose a similar method for an immobile bicycle, while Lautenschlager shows an immobile bike with some of the above-mentioned features including a controller 10. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include a similar arrangement on an immobile bicycle, as shown in Lautenschlager, to permit the user to experience gearshifting, and allowing him/her to simulate riding an actual bicycle, thus increasing enjoyment of the activity

4. ALLOWABLE SUBJECT MATTER

a. **Claims 2, 6-16 and 21-26** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

b. **Claims 27-59** would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

Prior art does not disclose a method for controlling an electronically-assisted bicycle gearshift, the novel steps in combination with those provided above with, *inter alia*,

Including several operating modes such as normal ride, and adjustment operating, modes, and,

Adjusting the adjustment variable via zeroing, increasing/decreasing its value.

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5. The prior art made of record, and not relied upon, is considered pertinent to the disclosure: Spencer et al 6047230, Horiuchi 6367833, 6467786, Kimura 6146297, Ethington 5599244, Watarai 5577969, Bellio 5356348, Browning 5261858, Chilcote et al 4952196, Clem et al 4605240, Studor et al 6152856, Grigoriev 5501648, Harnden et al 5480366, Shatford et al 4976435, Ulrich et al 5466200.

6. Communication with USPTO/Examiner

Any inquiry concerning this communication, or others, should be directed to Ms. Lum at 703 305-0232, M-F, 9-6. If attempts to reach the examiner are unsuccessful, her supervisor, Ms. Lesley Morris is at 703 308-0629. Our fax number is 703 872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications: private PAIR only, for published applications: private or public PAIR. For more information re PAIR: <http://pair-direct.uspto.gov>. Questions re private PAIR: contact the Electronic Business Center (EBC) at 866 217-9197.

Ms. Lee S. Lum
Examiner
6/7/04



LESLEY D. MORRIS
SUPERVISORY PATENT EXAMINER
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